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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/561,185 | BARTLETT ET AL. |
| | Examiner | Art Unit |
| | Charissa Ahmad | 3635 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 December 2008.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 and 4-29 is/are pending in the application.
- 4a) Of the above claim(s) 13,17-19,21-23 and 25-29 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-12,14-16,20 and 24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>12/31/08 and 2/23/09</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 12/23/08 is acknowledged. Claims 2 and 3 are canceled; Claims 13, 17-19, 21-23, and 25-29 have been withdrawn. Claims 1, 4-12, 14-16, 20, and 24 will be considered below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Walker et al. (US Patent 6,397,550 B1).** Walker et al. discloses a channel-shaped structural beam (10) comprising: a planar elongate web (12); and hollow, parallel-sided substantially rectangular flanges (14, 16) extending parallel to each other perpendicularly from a plane of said web along opposite sides thereof, said hollow flanges both extending in the same direction away from one face of said web, wherein a side of each of said flanges is coplanar with said web (Figure 1). Though Walker et al. does not disclose the dimensions of its beam and while the drawings are not to scale, there is nothing in the disclosure to indicate that the drawings are a distortion and the beam appears to have the same dimensional ratios as those claimed.

Claim Rejections - 35 USC § 103

4. **Alternatively, Claims 1, 4-12, 14-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (US Patent 6,397,550 B1).** Walker et al. discloses a channel-shaped structural beam (10) comprising: a planar elongate web (12); and hollow, parallel-sided substantially rectangular flanges (14, 16) extending parallel to each other perpendicularly from a plane of said web along opposite sides thereof, said hollow flanges both extending in the same direction away from one face of said web, wherein a side of each of said flanges is coplanar with said web (Figure 1).

With respect to the dimensions, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the beam of Walker et al. having the width, thickness and depth dimensions disclosed in Claims 1 and 4-9, since the dimensions would have been a matter of design choice and the beam of Walker et al. would operate equally well with any desired dimensions. No unexpected results are obtained from the claimed dimensional ratios and as such they are viewed as nothing other than obvious choice of design. See also MPEP 2144.04 stating that in *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. It would have been obvious to one having ordinary skill in the art to optimize the

dimensions of a beam using the known engineering principles and equations to produce a beam having the desired characteristics for a particular purpose.

Additionally, Walker et al. discloses the claimed invention except for fabricating the beam out of high strength steel and stainless steel. It would have been obvious to one having ordinary skill in the art at the time of the invention to fabricate the beam out of high strength steel, or stainless steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re-Leshin*, 125 USPQ 416.

Finally, Claims 15, 16 and 20 disclose different processes for forming the beam. The court in *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) held that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See MPEP 2113. In the instant case, the beam disclosed in Walker et al. is the same as what is disclosed in the claims despite the fact that the beam of Walker et al. may have been formed by a different process.

5. **Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (US Patent 6,397,550 B1) in view of Becker et al. (US Patent 2,264,897).** Walker et al. discloses the claimed invention as discussed above except it does not disclose a corrosion resistant coating. Becker et al. discloses sheet steel having a corrosion resistant coating (Lines 2-

4, Column 1, Page 2). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to provide a corrosion resistant coating on the beam of Walker et al. in view of the teaching of Becker et al. The motivation for doing so would have been to weatherproof the beam.

Response to Amendment

6. The declaration under 37 CFR 1.132 filed 12/23/08 is insufficient to overcome the rejection of claims 1-12, 14-16, 20, and 24 based upon 35 U.S.C. 103(a) as set forth in the last Office action. Applicant must show that the difference between the claimed invention and the prior art is in kind and not in degree. The showing must be commensurate in scope with the claimed invention. Applicant must provide test data and analysis consisting of a direct comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims. The showing should provide the actual steps carried out, the materials employed and the results. Nothing concerning the work relied upon should be left to conjecture. A statement that the prior art invention did not perform well is insufficient. Results must be due to the claimed features and not to unclaimed features. The burden is on the applicant to establish that the results are in fact unexpected, unobvious and of statistical and practical significance.

In the instant case, Applicant has failed to provide a direct comparison between the claimed invention and the closest prior art. Applicant references Oliver et al. without providing a direct comparison between it and the claimed invention. It is insufficient to make the assumption that Oliver et al. would not perform well over the claimed ranges. Applicant has also

provided a comparison between a hollow flange beam, a tapered flange beam and a parallel flange beam. These do not appear to be the closest prior art.

It is well known in the art that by manipulating critical elements of a beam such as, the width, height, depth, or thickness of sections of a beam, the beam will perform differently. Engineering textbooks and manuals such as Mechanics of Materials¹, Tubular Structures VIII², and Hollow Flange Beam Member Design Manual³ as well as the references provided by Applicant in the declaration on pages 16 and 17 provide the equation principals, such as moment of inertia, involved in designing structural beams to meet desired design requirements such as loading, stress, strain and deflection characteristics. It would have been obvious to one having ordinary skill in the art to optimize the beam using the known equations to produce a beam having the desired characteristics for a particular purpose.

Response to Arguments

7. Applicant's arguments with respect to claims 1-12, 14-16, 20, and 24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

¹ Beer, Ferdinand and Johnston, E., Jr., (New York: McGraw-Hill, 1981), 348-470.

² Choo, Y.S. and van der Vugte, G.J., eds, (Netherlands: Balkema, 1998), 399-408.

³ Dempsey, Ross, (Australia: Acacia Ridge: Palmer Tube Mills, 1993).

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charissa Ahmad whose telephone number is (571) 270-5220. The examiner can normally be reached on Monday - Friday 7:30 am to 5 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charissa Ahmad
Examiner
Art Unit 3635

/Charissa Ahmad/
Examiner, Art Unit 3635

/Robert J Canfield/
Supervisory Patent Examiner, Art Unit 3635